

REVIEW

(4)

Static and Dynamic Electricity—By William R. Smythe. Pp xxi+616. McGraw-Hill Book Company, New York, Toronto, London, 1950. Price \$ 8.5.

This is the second edition of the book, the first edition of which was published in 1939. As pointed out in the preface to the first edition, special stress has been laid on solution of problems in electricity and magnetism which are generally encountered in research. A basic knowledge in vector analysis has been assumed to be possessed by the student in treating the problems, but the use of contour integration has been avoided.

In electrostatics, method of images, Legendre polynomials and Bessel's, functions have been applied to problems on potential. In electrodynamics, besides chapters on Flow of current in networks and two and three dimensional conductors, Eddy currents, Magnetism, Electromagnetic waves, etc., there are important chapters on Electromagnetic radiation and Wave guides and Cavity resonators. There is also a chapter on special relativity and the motion of charged particles. The mks (metre-kilogram second) system of units has been used throughout, but in an Appendix the factors of conversion to cgs units have been given in different tables.

The book will be found useful to students studying for the B. Sc. (Hons.) and M. Sc. degrees of Indian Universities. It is also a good reference book which can be used profitably by research workers.

The paper used and quality of printing leave nothing to be desired.

S. C. S.